

VOLAC/SENSIENT, FELINFACH

Analysis of Liquid Sludge

Sample Name: Volac / Sensient 1

Report No: 91949

Sample No: 166297

Date: 08/05/2025

Application rate (t/ha) 37.0
Application rate (t/acre) 15.0
pH 7.76
Dry solids (%) 1.81

Organic Matter (%) 0.98

NUTRIENT CONTENT

	result	units	Total		Available	
			(kg/t)	(kg/ha)	(kg/t)	(kg/ha)
Nitrogen (N)	0.11	%	1.1	41	0.2	8
Ammonium-N	588	mg/kg	0.6	22		
Phosphorus (P)	525	mg/kg	0.5	19		
Phosphate (P ₂ O ₅)			1.2	44	0.7	27
Potassium (K)	1061	mg/kg	1.1	39		
Potash (K ₂ O)			1.3	47	1.0	38
Magnesium (Mg)	90.9	mg/kg	0.1	3		
Magnesium (MgO)			0.2	6	0.0	1
Sulphur (S)	81	mg/kg	0.1	3		
Sulphur (SO ₃)			0.2	7	0.0	1

POTENTIALLY TOXIC ELEMENTS

	result	units	Rate		Limit
			(g/tonne)	(kg/ha)	(kg/ha/yr)
Zinc	1.55	mg/kg	1.55	0.06	15.00
Copper	0.20	mg/kg	0.20	0.01	7.50
Nickel	0.20	mg/kg	0.20	0.01	3.00
Lead	0.50	mg/kg	0.50	0.02	15.00
Cadmium	0.01	mg/kg	0.01	0.00	0.15
Chromium	0.23	mg/kg	0.23	0.01	15.00
Mercury	0.05	mg/kg	0.05	0.00	0.10

All results expressed on sample as received. The copper, nickel, lead, cadmium and mercury concentrations are less than the minimum level of detection, consequently, the calculated values will be less than those shown

VOLAC/SENSIENT, FELINFACH

Analysis of Liquid Sludge

Sample Name: Volac / Sensient 1

Report No: 91949

Sample No: 166297

Date: 08/05/2025

Application rate (t/ha) 52.0
Application rate (t/acre) 21.0
pH 7.76
Dry solids (%) 1.81

Organic Matter (%) 0.98

NUTRIENT CONTENT

	result	units	Total		Available	
			(kg/t)	(kg/ha)	(kg/t)	(kg/ha)
Nitrogen (N)	0.11	%	1.1	57	0.2	11
Ammonium-N	588	mg/kg	0.6	31		
Phosphorus (P)	525	mg/kg	0.5	27		
Phosphate (P ₂ O ₅)			1.2	63	0.7	38
Potassium (K)	1061	mg/kg	1.1	55		
Potash (K ₂ O)			1.3	66	1.0	53
Magnesium (Mg)	90.9	mg/kg	0.1	5		
Magnesium (MgO)			0.2	8	0.0	1
Sulphur (S)	81	mg/kg	0.1	4		
Sulphur (SO ₃)			0.2	11	0.0	2

POTENTIALLY TOXIC ELEMENTS

	result	units	Rate		Limit
			(g/tonne)	(kg/ha)	(kg/ha/yr)
Zinc	1.55	mg/kg	1.55	0.08	15.00
Copper	0.20	mg/kg	0.20	0.01	7.50
Nickel	0.20	mg/kg	0.20	0.01	3.00
Lead	0.50	mg/kg	0.50	0.03	15.00
Cadmium	0.01	mg/kg	0.01	0.00	0.15
Chromium	0.23	mg/kg	0.23	0.01	15.00
Mercury	0.05	mg/kg	0.05	0.00	0.10

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VOLAC/SENSIENT, FELINFACH

Analysis of Liquid Sludge

Sample Name: Volac / Sensient 1

Report No: 91949

Sample No: 166297

Date: 08/05/2025

Application rate (t/ha) 66.0
Application rate (t/acre) 26.7
pH 7.76
Dry solids (%) 1.81

Organic Matter (%) 0.98

NUTRIENT CONTENT

	result	units	Total		Available	
			(kg/t)	(kg/ha)	(kg/t)	(kg/ha)
Nitrogen (N)	0.11	%	1.1	73	0.2	15
Ammonium-N	588	mg/kg	0.6	39		
Phosphorus (P)	525	mg/kg	0.5	35		
Phosphate (P ₂ O ₅)			1.2	79	0.7	48
Potassium (K)	1061	mg/kg	1.1	70		
Potash (K ₂ O)			1.3	84	1.0	67
Magnesium (Mg)	90.9	mg/kg	0.1	6		
Magnesium (MgO)			0.2	10	0.0	1
Sulphur (S)	81	mg/kg	0.1	5		
Sulphur (SO ₃)			0.2	13	0.0	3

POTENTIALLY TOXIC ELEMENTS

	result	units	Rate		Limit
			(g/tonne)	(kg/ha)	(kg/ha/yr)
Zinc	1.55	mg/kg	1.55	0.10	15.00
Copper	0.20	mg/kg	0.20	0.01	7.50
Nickel	0.20	mg/kg	0.20	0.01	3.00
Lead	0.50	mg/kg	0.50	0.03	15.00
Cadmium	0.01	mg/kg	0.01	0.00	0.15
Chromium	0.23	mg/kg	0.23	0.02	15.00
Mercury	0.05	mg/kg	0.05	0.00	0.10

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VOLAC/SENSIENT, FELINFACH

Analysis of Liquid Sludge

Sample Name: Volac / Sensient 1

Report No: 91949

Sample No: 166297

Date: 08/05/2025

Application rate (t/ha) 100.0
Application rate (t/acre) 40.5
pH 7.76
Dry solids (%) 1.81

Organic Matter (%) 0.98

NUTRIENT CONTENT

	result	units	Total		Available	
			(kg/t)	(kg/ha)	(kg/t)	(kg/ha)
Nitrogen (N)	0.11	%	1.1	110	0.2	22
Ammonium-N	588	mg/kg	0.6	59		
Phosphorus (P)	525	mg/kg	0.5	53		
Phosphate (P ₂ O ₅)			1.2	120	0.7	72
Potassium (K)	1061	mg/kg	1.1	106		
Potash (K ₂ O)			1.3	127	1.0	102
Magnesium (Mg)	90.9	mg/kg	0.1	9		
Magnesium (MgO)			0.2	15	0.0	2
Sulphur (S)	81	mg/kg	0.1	8		
Sulphur (SO ₃)			0.2	20	0.0	4

POTENTIALLY TOXIC ELEMENTS

	result	units	Rate		Limit
			(g/tonne)	(kg/ha)	(kg/ha/yr)
Zinc	1.55	mg/kg	1.55	0.16	15.00
Copper	0.20	mg/kg	0.20	0.02	7.50
Nickel	0.20	mg/kg	0.20	0.02	3.00
Lead	0.50	mg/kg	0.50	0.05	15.00
Cadmium	0.01	mg/kg	0.01	0.00	0.15
Chromium	0.23	mg/kg	0.23	0.02	15.00
Mercury	0.05	mg/kg	0.05	0.01	0.10

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Analysis of Liquid Sludge

Sample Name: Volac / Sensient 1

Report No: 91949

Sample No: 166297

Date: 08/05/2025

Application rate (t/ha) 150.0
Application rate (t/acre) 60.7
pH 7.76
Dry solids (%) 1.81

Organic Matter (%) 0.98

NUTRIENT CONTENT

	result	units	Total		Available	
			(kg/t)	(kg/ha)	(kg/t)	(kg/ha)
Nitrogen (N)	0.11	%	1.1	165	0.2	33
Ammonium-N	588	mg/kg	0.6	88		
Phosphorus (P)	525	mg/kg	0.5	79		
Phosphate (P ₂ O ₅)			1.2	180	0.7	108
Potassium (K)	1061	mg/kg	1.1	159		
Potash (K ₂ O)			1.3	191	1.0	153
Magnesium (Mg)	90.9	mg/kg	0.1	14		
Magnesium (MgO)			0.2	23	0.0	2
Sulphur (S)	81	mg/kg	0.1	12		
Sulphur (SO ₃)			0.2	30	0.0	6

POTENTIALLY TOXIC ELEMENTS

	result	units	Rate		Limit
			(g/tonne)	(kg/ha)	(kg/ha/yr)
Zinc	1.55	mg/kg	1.55	0.23	15.00
Copper	0.20	mg/kg	0.20	0.03	7.50
Nickel	0.20	mg/kg	0.20	0.03	3.00
Lead	0.50	mg/kg	0.50	0.08	15.00
Cadmium	0.01	mg/kg	0.01	0.00	0.15
Chromium	0.23	mg/kg	0.23	0.03	15.00
Mercury	0.05	mg/kg	0.05	0.01	0.10

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V850

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LIQUID WASTE

SLURRY/SLUDGE ANALYSIS RESULTS

Sample Reference :

VOLAC/SENSIENT 1

Sample Matrix : SLURRY/SLUDGE

Laboratory References

Report Number 91949
Sample Number 166297

Date Received 08-MAY-2025
Date Reported 13-JUN-2025

The sample submitted was of adequate size to complete all analysis requested.

The sample will be kept under refrigeration for at least 3 weeks.

ANALYTICAL RESULTS *on 'as received' basis.*

Determinand	Value	Units
Oven Dry Solids	1.81	%
E Coli [Fresh]	310	cfu/g
Conductivity 1:6	1917	uS/cm
Total Kjeldahl Nitrogen	0.11	% w/w
Nitrate Nitrogen	<10	mg/kg
Ammonium Nitrogen	588	mg/kg
Total Phosphorus (P)	525	mg/kg
Total Potassium (K)	1061	mg/kg
Total Magnesium (Mg)	90.9	mg/kg
Total Copper (Cu)	<0.2	mg/kg

Released by *Karen Mitchell*

Date *13/06/25*

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LIQUID WASTE

SLURRY/SLUDGE ANALYSIS RESULTS

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ANALYTICAL RESULTS *on 'as received' basis.*

Determinand	Value	Units
Total Zinc (Zn)	1.55	mg/kg
Total Sulphur (S)	81.0	mg/kg
Total Calcium (Ca)	601	mg/kg
Total Lead (Pb)	<0.5	mg/kg
Total Cadmium (Cd)	<0.01	mg/kg
Total Mercury (Hg)	<0.05	mg/kg
Total Nickel (Ni)	<0.2	mg/kg
Total Chromium (Cr)	0.23	mg/kg
Total Sodium (Na)	725	mg/kg
pH 1:6 [Fresh]	7.76	

Released by *Karen Mitchell*

Date *13/06/25*

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LIQUID WASTE

SLURRY/SLUDGE ANALYSIS RESULTS

Sample Reference :

VOLAC/SENSIENT 1

Sample Matrix : SLURRY/SLUDGE

Laboratory References

Report Number	91949
Sample Number	166297

Date Received	08-MAY-2025
Date Reported	13-JUN-2025

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The sample will be kept under refrigeration for at least 3 weeks.

ANALYTICAL RESULTS *on 'as received' basis.*

Determinand	Value	Units
Organic Matter LOI	0.98	% w/w
Coliforms [fresh]	250000	cfu/g
B.O.D. [fresh]	8650	mg/l
C.O.D. [fresh]	18060	mg/kg
Oils,Fats and Grease	1099	mg/kg
Salmonella spp [fresh]	Negative	in 25g
EC [Neat]	9572	uS/cm

Released by *Karen Mitchell*

Date *13/06/25*